

STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

IN THE MATTER OF THE APPLICATION OF)	
MOSQUITO HARBOR FARM FOR AN)	FINDINGS OF FACT,
EXPERIMENTAL LIMITED-PURPOSE AQUACULTURE)	CONCLUSIONS OF LAW
LEASE LOCATED IN OTIS COVE,)	AND DECISION
ST. GEORGE, KNOX COUNTY, MAINE)	

On February 15, 2000, Mosquito Harbor Farm, represented by Timothy Dowling of Tenants Harbor, Maine, applied for a limited-purpose (experimental) aquaculture lease totaling two (2.0) acres of coastal waters of the State of Maine, located on Otis Cove, in the St. George River, St. George, Knox County, Maine. The applicant requested the lease for a term of three (3) years for the purpose of cultivating American oysters (*Crassostrea virginica*) and hard clams (*Mercenaria mercenaria*) using bottom containment and suspended culture techniques.

Approval of limited-purpose aquaculture leases is governed by 12 M.R.S.A. §6072-A. This statute provides that the Commissioner of the Department of Marine Resources (DMR) may grant a lease if he determines that the project will not unreasonably interfere with the ingress and egress of riparian owners, navigation, fishing or other uses of the area; the ability of the site and surrounding areas to support ecologically significant flora and fauna; or the use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site.

A public hearing was held on this application June 26, 2000, at 7:00 p.m., in St. George.

Intervenor status was granted to riparian landowners Charles S. DuBack and Alfred Zacharias (hereafter referred to as Intervenor DuBack and Intervenor Zacharias).

Evidence Concerning the Nature and
Impact of the Proposed Lease

The applicant, Mosquito Harbor Farm, represented by the owner Timothy Dowling (hereafter referred to as the applicant), provided testimony about the application, his background and experience in aquaculture. Exhibits 1 and 2.

The applicant testified that he has experience in commercial fisheries and a masters degree in biomarine resources. Most recently he has been the aquaculture instructor at the Lubec High School, and a manager for a limited-purpose aquaculture lease granted to the Island Institute in Otis Cove on September 21, 1998, to raise shellfish.

The applicant testified that he would use suspended culture methods that place gear on the surface of the water and on the ocean floor. Seed oysters would be obtained from the Marshall Point Sea Farm hatchery in Port Clyde, the Pemaquid Oyster Company hatchery in Bremen or the Island Institute lease in Otis Cove. Seed hard clams would be obtained from Marshall Point Sea Farm or Mook Sea Farm hatchery in Walpole. Seed shellfish (2-3mm and 2-5mm sizes) would be placed in ADPI mesh bags or in 3' by 4' by 4 inch high, ½-inch mesh, wire trays. The ADPI bags or trays would be placed inside wire racks described as cages with shelves. Each wire rack would measure 8' long by 3' wide and 3' high. One rack would hold up to eight trays or 15 ADPI bags. The applicant testified that the maximum of 144 racks proposed in the application would be reduced to 75 racks. This reduction would reduce the maximum number of proposed trays from 1,152 to 600. If ADPI bags were used instead of trays there would be a maximum possible of 1,125 bags (75 racks x 15 bags or racks).

Racks deployed in strings on the surface would be floated using 8-inch foam filled PVC pipe. The strings would be moored with ¾-inch polysteel line connected to 500-pound concrete moorings. Moorings would be attached at the ends and also spaced along the strings. According to the application, there would be a 50-foot distance from the end of the mooring lines to the proposed lease boundary. A maximum of eight strings, spaced 12'-15' apart, would be

deployed on the surface. The applicant testified that the strings of racks, located on the surface, would be restricted to the eastern one-third of the proposed lease area, approximately 133' of the total 400' length.

During the winter months the racks would be sunk to the bottom. Due to the heavy weight of the racks, a crane would be required to move them. The warmer growing season, when the surface gear would be deployed, would occur between late May and November. Some racks would remain on the bottom year round. The clearance between the 3' high racks on the bottom and the surface at mean low water (MLW) would be 14'. The depth at MLW was described as 17' for the location which was requested to be shifted to the west.

The applicant testified that he would request to shift the location of the proposed boundaries west towards the St. George River. The applicant referred to the Department's site report for the updated boundary coordinates and distances to shore. He testified that the revised location would increase the distance to the riparian properties and to the nearby Island Institute lease.

The applicant testified that there would be room for navigation and riparian ingress and egress. In his opinion, vessel traffic is limited to a few boats which are small and would easily pass over the gear deployed on the bottom and also over the ledge or shallow area southwest of the proposed site. He stated that he observed one boat mooring at the time he submitted his application. This mooring is used for a large lobster boat, owned by Thomas Lugar, and is located off Mr. Lugar's property on the eastern side of Otis Cove.

The application included a letter from former St. George Harbormaster, Stephen Scott, regarding navigation and moorings in the proposed lease area. It was the Harbormaster's opinion that the proposed lease would not interfere with local traffic, that there is plenty of room for moorings- current moorings are located on the opposite side of Otis Cove, and that lobster fishing is limited in this area.

The application also included a memo from the local Marine Patrol Officer (MPO). The MPO's memo indicated that lobster fishing was limited in Otis Cove, and that the cove is used to

a limited amount for duck hunting, recreational fishing and access for clam diggers to the intertidal portion of Otis Cove. In the MPO's opinion, the proposed lease would be compatible with the existing uses and, to his knowledge, there were no private moorings in the vicinity of the proposed lease.

The applicant testified that he would not use any land on Otis Cove to access the proposed lease in order to land any product. He stated that he would access the proposed lease using his boat, which is moored in Port Clyde. He would use the public landing in Port Clyde to unload any product.

The applicant explained that he selected the location based on testing he has conducted during the past three years on phytoplankton, temperatures and growth rates. He also stated that the selection was based on the lack of objections he received while he managed the nearby lease for the Island Institute. Based on his observations as the lease manager, he stated that the area had a limited amount of traffic and lobster fishing compared to the river. In his opinion, the proposed lease has shallow water depths compared to the river, and he believed it to be out of view from the eastern shore by choosing to locate west of Ten Pound Island.

The Marine Resources Director of the Island Institute testified on the applicant's behalf. The witness testified that the Island Institute's objective is to help persons living in the island and coastal communities to use activities that are compatible with local uses. The Island Institute assists interested persons to learn new activities that help them supplement their incomes. In the applicant's case, he currently provides volunteer help at the Island Institute's lease in exchange for a share of the shellfish raised at their lease.

A biologist, employed by the Department, testified about his observations during a site visit and information in the Department's report. The biologist and his assistant visited the proposed lease site on June 12, 2000. Their report included the following: proximity and positioning measurements of the proposed lease boundaries and distances to shore using a differential global position system (dgps); observations of local fisheries; navigation issues and documented information. Exhibit 3.

The biologist testified that during the site visit new coordinates were determined for moving the 200' by 400' proposed lease. The dimensions stayed the same and were shifted approximately 76' due north-northwest in the direction of the main river off the west side of Ten Pound Island. According to his report, the distance from the southeast corner to the island would be approximately 112'. The distance to the nearby lease would be approximately 166' and to the mainland shore (owned by Intervenor Duback) due east-southeast would be approximately 686'. The acreage of the proposed 200' by 400' dimensions was noted in the report to be approximately 1.84 acres not 2.0 acres as listed in the application.

According to the biologist's report no commercial or recreational fishing activity was observed. One mooring was observed, located due south (along the eastern shore), previously described as belonging to Thomas Lugar. It was explained that the mooring owner is also co-lease holder of a limited-purpose lease (WYET OC2) located between the Island Institute lease previously described and the mainland off the southern boundary of Intervenor DuBack's property. According to the report there would be adequate room, approximately 112', for vessel traffic between the proposed lease and the western shore of Ten Pound Island and the Island Institute nearby lease (TEAL OC1) due south southeast. The depth of water between the island and near shore was described as extremely shallow at 5-10' at low tide which would likely preclude moorings for large vessels.

Intervenor DuBack, the riparian owner of Ten Pound Island and the shorefront property due east of the island, testified in opposition. Exhibits 4 and 5. The intervenor objected to not being personally notified as a riparian shorefront property owner within 1,000' of the proposed lease for the two existing limited-purpose leases when they were proposed, and to the aquaculture leasing process, which in his opinion is inadequate in its scope and notification requirements. He testified that he objects more to the previously granted leases, located near his properties, because he stated that he was not notified of those applications and that those leases are now being used as stepping stones to other leases.

Intervenor DuBack testified that, in his opinion, the statements in the application by the previous Harbormaster (Stephen Scott) regarding moorings and navigation were wrong. He described moorings on the east side of Otis Cove. The moorings included his mooring, and Intervenor Zacharias' mooring located between the east side of Ten Pound Island and the shore, plus the previously described Lugar mooring and a mooring that belongs to Mr. Ullman that are located off their respective properties south of the proposed lease. He described a storm anchorage located within or adjacent to the lease identified as TEAL OC1 which is south of Ten Pound Island. He testified that the existing leases present a blockade to the storm anchorage. He stated that the leases would impact his real estate value with regard to the ability as a landowner to have a mooring assigned to the property that, in his opinion, contributes to the real estate value. Intervenor DuBack also described his current boat and stated that he has previously owned, sailed and moored a large schooner, that would draw a four-foot draft, off his property in Otis Cove. He stated that he generally uses a dinghy to access Ten Pound Island at its southern end.

Intervenor Zacharias, a riparian owner, adjacent to the north from Intervenor DuBack's property, testified in opposition. Intervenor Zacharias testified that he has one mooring off his property which he uses for his sailboat (30'). He testified that the proposed lease would not interfere with the use of his dock or mooring. Intervenor Zacharias testified that he opposed the expansion of leases in Otis Cove that threatens his future access to navigable waters. In his opinion the limited-purpose lease application process is one-sided and places the water front resources in front of his home in jeopardy due to the expansion of leases. Mrs. Zacharias also testified in opposition. In her opinion the former Harbormaster's statements were inaccurate, she stated that the St. George selectmen were not notified and that the personnel of the Department cannot be trusted because they are biased. Mrs. Zacharias answered questions about her sailing activities. She testified that they sail to and from their mooring from the north and east side of Ten Pound Island. She stated that the ledges located southeast of the proposed lease were shallow and she would only navigate into Otis Cove across that area at

high tide and she therefore does not access her mooring from the south and east side of Ten Pound Island because of the described ledges in the southeast portion of Otis Cove.

A riparian, whose property is located due south approximately 1,000' from the proposed lease, provided testimony. He disagreed with the previous Harbormaster's statements and the Department's description of one mooring in the proposed lease vicinity. He testified that his 23' motorboat was on its mooring (located near the 4' mark on the nautical chart) during the day that the Department's site review was conducted and was overlooked. He stated that his neighbor, riparian Mr. Lugar, has two moorings and that these moorings were present at the time of the site visit. He testified that the proposed lease would not prevent access to his mooring and that he did not oppose aquaculture per se; however, he objects to the expansion of leases in Otis Cove which would hinder or prevent access to his mooring and the lack of limitations on the number of leases granted there. He testified that, in his opinion, the distance between Ten Pound Island and the charted ledge due southeast designated by a starred ledge and a 6' depth, was much narrower than indicated due to inaccuracy of the chart. In his opinion the 6' low tide depth on the chart is a high tide depth making the area shallower than is published and therefore in his opinion safe passage into Otis Cove is much narrower than charted.

The current St. George Harbormaster, Dave Schamanska, provided testimony that, based on the available town records he has reviewed since he began in April 2000, there are approximately six moorings in Otis Cove. He explained that the area he defines as Otis Cove encompasses the waters east of the northeast side of Otis Point and north to Hawthorne Point and a location referred to as Seal Rock. The five mooring locations described in Exhibit 5, were in his opinion, where he would expect them to be located based on the available records. The Harbormaster expressed concerns about inadequate navigation markings required by the U.S. Coast Guard. He testified that the one problem he foresaw was for that of sailing vessels tacking around the backside, south and east of Ten Pound Island. He stated that the existing leases would interfere with this type of access. He explained that the "traditional storm anchorage in Otis Cove" described is a listing in yachting publications and would be used by

transient sailing vessels for pleasure mooring, or for storm protection, as the bottom is soft and would hold an anchor well in a storm. He could not quantify the activity in this cove, as he has only been the Harbormaster a short time.

Findings of Fact

The proposed lease is located in approximately 17' at mean low water off the west side of Ten Pound Island in Otis Cove on the St. George River. According to estimates by the Department's biologist there would be approximately 112' between the eastern shore of Ten Pound Island and the proposed lease western boundary. There would be approximately 686' from the proposed southeast corner to the nearest mainland riparian shore. The nearest riparian moorings (2) are located on the east (opposite) side of Ten Pound Island and based on the maps and charts are between 400' to 500' distant. The riparian owner of Ten Pound Island testified that he gains access at the southern tip of that island from his mainland property by small boat. The applicant testified that he would access the proposed lease from public facilities in Port Clyde, and he did not request the use of any riparian lands.

There were repeated negative concerns expressed about two existing limited-purpose leases located due south of Ten Pound Island, future expansion of leases in Otis Cove and the lack of riparian and Town notification. The value of real estate assigned a mooring was also a concern.

All of the required notices were provided in this matter. According to the Department file, the Town of St. George and other agencies were mailed the notice of the application on April 3rd, 2000, to correspond with the public notice published in the Courier Gazette on April 6, 2000. The notice of public hearing and application were mailed to the Town, the Chair of the St. George Water Resources Management Board, riparians and others on May 22, 2000, and the 30 day public hearing notices were published in the Courier Gazette on May 25, 2000, and June 15, 2000, and in the June edition of the Commercial Fisheries News newspaper.

Regarding assignment of moorings and property value, under 38 M.R.S.A. §3 mooring sites, except as described in 38 M.R.S.A. §3-A, are non-transferable and therefore cannot be sold, as such, as part of real estate.

Regarding concerns about the presence of two existing limited-purpose leases southeast of the proposed lease, the nearest distance to which is estimated as approximately 166', the statutes limit the term of limited-purpose leases to a maximum of three years and a maximum of two acres. The existing limited-purpose leases expire September 20, 2001, for TEAL OC1 and September 21, 2001, for WYET OC2. In order to continue operations at a limited-purpose lease site 12 M.R.S.A. §6072-A(20) requires the lease holder to apply through the standard lease process for a commercial limited-purpose lease under 12 M.R.S.A. §6072 or, for a scientific limited-purpose lease, under 12 M.R.S.A. §6072(A)(18) before the lease term expires. A public hearing would be required for the renewal of the existing leases and notices would be forwarded as required under 12 M.R.S.A. §6072. The concerns expressed regarding these existing leases are appropriately addressed in that process.

Regarding riparian ingress and egress, according to the Department's biologist there is approximately 112' between the proposed lease eastern boundary and the west shore of Ten Pound Island. Testimony by Intervenor DuBack indicated that his access to Ten Pound Island is generally by small boat at the southern end of his island. Testimony by Intervenor Zacharias and riparian Ullman indicated the proposed lease would not interfere with access from their shores. I find that the lease will not unreasonably interfere with the ingress and egress of riparian owners, based on the approximately 112' distance to the nearest shore of the small island, testimony by riparians and that no riparian lands are requested to be used.

The proposed lease is located east of the main channel of the St. George River. Its eastern boundary is approximately 112' from the shore of Ten Pound Island, and its western boundary, based on the charts and scale provided, is approximately 800' to a ledge due southeast referred to as Otis Rock and 400' to 500' from a shoal area extending from and due northwest of that ledge. According to the Department's biologist report, the water depth between

the south end of Ten Pound Island and the shore is shallow, approximately 5 to 10' at mean low water. The distance to the nearest lease in Otis Cove is approximately 166' due south, and it is approximately 686' to the nearest mainland shore owned by Intervenor DuBack.

Testimony from the Department's biologist indicated that the 112' distance to the island would be adequate for typical vessel traffic passage and that it would be unlikely, in his opinion, that large vessels would attempt to moor in the shallow (5 to 10') waters located between the island and shore due southeast. Testimony from the current Harbormaster indicated that there are approximately six moorings in Otis Cove along the eastern shore, those identified in Exhibit 5 plus one other. He also indicated that the lease would need to be properly marked, according to the U.S. Coast Guard and that, in his opinion, the proposed and existing leases would interfere with sailboats tacking to the vicinity of the south and eastern side of Ten Pound Island. The Harbormaster testified that he was unfamiliar with navigational activities in Otis Cove since he is new in the job and has 45 miles of coastline to cover. One riparian testified that due to the shoal area near Otis Rock she would not sail from that area to the eastern side of Ten Pound Island. She explained that transit of the shoal was best done only at high tide. Concern was expressed by two riparians that the Otis Rock area is much more shallow than published and the proposed lease would therefore narrow the passageway into Otis Cove.

The applicant testified that there would be at least 14' of clearance between the surface and gear on the bottom. He testified that he would restrict use of the surface area of the proposed lease to the eastern one-third, approximately 133' by 200' of the total 400' by 200'. Given the application description of a 50' distance for moorings to the boundary, this would reduce the use of surface area to approximately 83' by 200'.

Given that the eastern two-thirds or approximately 267' by 200' would be bottom structures with 14' of clearance at mean low water, and therefore an estimated 600' to 700' of distance to the shoal southeast called Otis Rock, there is adequate room for passage into Otis Cove with the primary use of bottom structures. Given the testimony by the Department's biologist that the area southeast of the island to shore is shallow and therefore unlikely to be

used for large vessel moorings and, based on the charts, maps and testimony in the records that there is at least 400' to 500' to any existing riparian mooring, I find that there is adequate room for riparians to access their moorings. Given that the general vicinity of Otis Cove surrounding the proposed lease was described by the Harbormaster to have soft sediments conducive to holding transient vessel anchors, such as for a storm anchorage or recreational overnight moorings, and based on the maps and charts, I find that the proposed lease will not unreasonably interfere with the use of the area for transient moorings. Based on the above, I find that the proposed lease will not unreasonably interfere with navigation given the condition that surface structures are limited to the eastern one-third of the lease area.

There are two existing aquaculture leases in the area. The distance to the nearest lease is approximately 166' due south from the proposed southeast corner. Testimony by the nearby leaseholder was supportive of the proposed lease. According to the local Marine Patrol Officer and former Harbormaster the area has limited commercial and recreational fishing activities, including a very limited amount of lobster fishing. The current Harbormaster was not yet familiar with the area to provide such information on the area. Based on the evidence that there is very limited lobster fishing, commercial and recreational fishing, and two limited-purpose leases that currently each expire September, 2001, I find that the lease will not unreasonably interfere with fishing, aquaculture leases or other uses of the area.

The proposed activities included the rearing of indigenous American oysters and hard clams (quahogs) using suspended and bottom containment cultivation techniques. No shellfish would be planted directly on bottom. According to the Department's biologist report the proposed lease is not located within any habitats regulated by the Department of Inland Fisheries and Wildlife. There is nothing in the record to indicate that the proposed activities would interfere with the local flora and fauna. Based on this evidence, I find that the proposed activities will not unreasonably interfere with the ability of the site and surrounding areas to support existing significant flora and fauna.

According to the evidence and testimony seed shellfish would be obtained from Maine hatchery and nursery sources including Marshall Point Sea Farm, Port Clyde, the Pemaquid Oyster Company, Bremen, the Island Institute, Rockland or from Mook Sea Farm, Walpole. Based on this evidence, I find that there is an available source of American oysters and hard-clams (quahogs) available.

Testimony by the applicant indicated he would use the public landing facilities in Port Clyde to access the proposed lease. According to the Department's biologist report there are no public facilities within 1,000' of the proposed lease. The Port Clyde landing is located over four miles south, down river, from the proposed lease. Based on this evidence plus the charts and maps in the record, I find that the proposed lease site activities will not unreasonably interfere with public use or enjoyment and that the proposed lease site is not located within 1,000' of any municipally, state or federally owned beaches, parks, or dock facilities.

Conclusions of Law

Based on the above findings, I conclude that:

1. the aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner;
2. the aquaculture activities proposed for this site will not unreasonably interfere with navigation given the condition that surface structures are limited to the eastern one-third of the lease area;
3. the aquaculture lease activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area;
4. the aquaculture lease activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna;
5. the applicant has demonstrated that there is an available source of American oysters; and
6. the aquaculture lease activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000' of municipally, state or federally owned beaches, parks, or docking facilities.

The evidence in the record supports a finding that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072-A.

Decision

Based on the foregoing, the Commissioner grants the requested lease of 1.84 acres to the applicant for a period of three (3) years from the date of this decision for the purposes of cultivating American oysters (*Crassostrea virginica*) and hard-shell clams (*Mercenaria mercenaria*) using suspended and bottom containment culture techniques. The applicant shall pay the State of Maine rent in the amount of \$50 per acre per year. The applicant shall post a bond or establish an escrow account in the amount of \$5,000 conditioned upon its performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations. A limited-purpose lease for commercial aquaculture research and development conveys only those rights specified in the lease.

Conditions to be Imposed on Lease

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities. Conditions are designed to encourage the greatest multiple, compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the aquaculture law.

The following conditions are placed on this lease:

1. commercial and recreational boating activities area allowed on the open areas of the lease;
2. the lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources regulations requirements Chapter 2.80;
3. all surface gear shall be restricted to the eastern one-third (133' long by 200' wide) of the lease area.

The Commissioner may commence revocation procedures if he determines that substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law are not being observed, the Commissioner may revoke the aquaculture lease.

Dated: _____

George D. Lapointe (Commissioner)
Department of Marine Resources